In response to the Office Action dated January 22, 2009, the Assignee respectfully requests reconsideration based on the above amendments and on the following remarks.

Claims 1-16 are pending in this application.

Rejection of Claim 16 under § 103 (a)

The Office rejected claim 16 under 35 U.S.C. § 103 (a) as being obvious over U.S. Patent Application Publication 2002/0097727 to Prakash in view of U.S. Patent Application Publication 2003/0202534 to Cloonan

The proposed combination of *Prakash* with *Cloonan*, though, teaches away and cannot support a *prima facie* case for obviousness. The M.P.E.P. expressly explains several situations in which a reference teaches away, including when a proposed modification "render[s] the prior art unsatisfactory for its intended purpose" or when the proposed modification "change[s] the principle of operation of a reference." *See* M.P.E.P. § 2145 (X)(D). If *Prakash* is combined with *Cloonan*, as the Office proposes, then many changes to both *Prakash's* and *Cloonan's* principles of operation are required. These changes render *Prakash* and *Cloonan* unsatisfactory for their intended purposes. The proposed combination of *Prakash* with *Cloonan*, then, cannot support a *prima facie* case for obviousness, so the Office is required to remove the § 103 (a) rejection of these claims.

Prakash's principle of operation is to increase bandwidth by using two separate networks. Prakash describes a "hybrid network" that increases bandwidth when necessary. See U.S. Patent Application Publication 2002/0097727 to Prakash at [0016]. A transmitting location and a receiving location are connected through two separate networks. See id. A "stream manager" at each location monitors buffer levels to transfer data to the receiving location using the two separate networks. See id. at [0017]. One of the networks provides Quality of Service

Page 6

Response to January 22, 2009 Office Action

("OOS") guarantees, while the other network is not OOS guaranteed. See id. at [0008], [0016], and [0017]. "The stream manager uses the non-OOS guaranteed link in situations where the receiving center buffer needs to be filled or the transmitting center buffer needs to be drained." Id. at [0017].

Cloonan's principle of operation is entirely different. Cloonan manages media access control ("MAC") domains to increase bandwidth. Cloonan describes a cable modern termination system ("CMTS") that manages media access control ("MAC") domains. See U.S. Patent Application Publication 2003/0202534 to Cloonan at [0029]. Each MAC domain may support nine (9) logical channels, and the virtual channels can be associated with different distribution nodes. See id. at [0028] and [0029]. When a distribution node experiences increased demand. extra domain channels can be used to provide increased bandwidth. See id. at [0037] and [0038]. Cloonan, in particular, explains one embodiment that uses switchable relays that can steer the path of bandwidth "from the extra downstream domain channels to the fiber nodes." Id. at [0039]. DOCSIS commands are then used to instruct the subscriber's cable modem regarding which frequency should be used. Id. at [0040].

The proposed combination of Prakash with Cloonan thus teaches away. Prakash's principle of operation increases bandwidth using two separate networks, while Cloonan's principle of operation increases bandwidth by allocating logical channels in MAC domains. If Prakash is combined with Cloonan, as the Office proposes, then Cloonan's teaching of an extra, shared logical channel could not be implemented using two separate networks, as Prakash teaches. Indeed, if extra bandwidth signals are sent over separate networks, as Prakash teaches, then Cloonan's entire teaching of an extra, shared MAC domain must be eliminated in order to provide extra bandwidth over separate networks, as required by Prakash.

Claim 16, then, is not obvious over Prakash and Cloonan. Cloonan's principle of operation must be changed, even eliminated, in order to make a prima facie case for obviousness. The patent laws, though, forbid changing a principle of operation to make a prima facie case for obviousness. Any proposed combination of *Prakash* and *Cloonan*, then, must fail. The Office is thus respectfully requested remove the rejection of claims 16.

## Rejection of other Claims under § 103 (a)

The Office rejected claims 1, 6, and 8-15 under 35 U.S.C. § 103 (a) as being obvious over U.S. Patent Application Publication 2002/136240 to Counterman in view of *Prakash* and further in view of *Cloonan*.

The Office also rejected claims 2, 5, and 7 under 35 U.S.C. § 103 (a) as being obvious over *Counterman* with *Prakash* and *Cloonan* and further in view of U.S. Patent 6,452,923 to Gerszberg, et al.

Any proposed combination of Counterman with Prakash and Cloonan must also teach away and cannot support a prima facie case for obviousness. The paragraphs above already provide compelling evidence that the proposed combination of Prakash and Cloonan requires impermissible changes to Cloonan's principle of operation. The above paragraphs even showed that at least some portions of Cloonan's principle of operation must be eliminated if combined with Prakash. If Counterman is combined with Prakash and Cloonan, as the Office proposes, then even Counterman's principle of operation must be impermissibly changed.

Counterman's principle of operation uses a shared line to physically separate subscribers when extra bandwidth is needed. Counterman's shared line, though, is not "dedicated" when additional bandwidth is needed. Counterman's shared line, in contradistinction, simultaneously delivers service to the physically separate subscribers. As Counterman explains, the "present invention allows the simultaneous delivery of different services to physically separate subscribers over a shared single pair of wires." U.S. Patent Application Publication 2002/136240 to Counterman at paragraph [0009]. "The wire pairs are used to simultaneously carry different services to physically separated subscribers, i.e., a portion of a common line carries one service to one location and a second service to another location." Id. (emphasis

added). See also id. at paragraphs [0011] and [0025]. Counterman's principle of operation, then, is to provide a shared line that simultaneously delivers service to physically separate subscribers.

The proposed combination of Counterman with Prakash and Cloonan, then, also requires an impermissible change to Counterman's principle of operation. Independent claims 1, 9, and 15 recite "temporarily dedicating and logically bonding the second physical medium to the subscriber's premise to provide additional bandwidth, such that first physical medium and the second physical medium share a session of information" (emphasis added). Counterman's principle of operation is to provide a shared line that simultaneously delivers service to physically separate subscribers, the Examiner's proposed combination cannot temporarily dedicate and logically bond "such that first physical medium and the second physical medium share a session of information" (emphasis added) without changing Counterman's principle of operation. Indeed, the proposed combination of Counterman with Prakash and Cloonan would require eliminating much of Counterman's teachings.

Claims 1-2, 5-6, and 7-15, then, are not obvious over any combination involving Counterman with Prakash and Cloonan. Counterman's principle of operation must be changed, even eliminated, in order to make a prima facie case for obviousness. The patent laws, though, forbid changing a principle of operation to make a prima facie case for obviousness. Any proposed combination of Counterman with Prakash and Cloonan, then, must fail. The Office is thus respectfully requested remove the rejection of these claims.

If any issues remain outstanding, the Office is requested to contact the undersigned at (919) 469-2629 or scott@scottzimmerman.com.

Respectfully submitted,

U.S. Application No.: 10/743,358 Examiner: Loo Art Unit: 2416
Response to January 22, 2009 Office Action

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